



Proposal for a New Vegetarian Restaurant in Hong Kong

Vicky Tsung-EN HSU
February 2020

Veganism is burgeoning in Hong Kong ...



Vegetarians grew at
29% CAGR

... because of



Millennials' Values



Social Media Buzz



Food Scandals

Introduction

Opening a vegetarian restaurant is a great business opportunity in Hong Kong

“Where would be the best location for a new vegetarian restaurant to be open in Hong Kong?”

Business Problem

The objective is to analyse and select the best location in Hong Kong to operate a new vegetarian restaurant



Restaurant Owners



Shopping Mall Managers



Restaurant Investors



Vegetarian Citizens

Target Audience

People who share the values of veganism or who eager to profit from the trend

List of Hong Kong's districts

To define the scope of the project



Geographical coordinates

To plot the map and to get the venue data



Venues, particularly restaurants

To perform clustering on the neighbourhoods



Data

The required data and the sources

- Obtain a list of districts of Hong Kong and the geographical coordinates through web scrapping Wikipedia pages
- Extract the venue data from Foursquare API
- Filter the “Restaurant” venues, and identify “Vegetarian / Vegan Restaurant” venues
- Group data by district and calculate the density of vegetarian restaurant
- Execute K-means clustering on the data
- Visualize the clusters on a map using Folium
- Analyze the result and provide the advises

Methodology

The steps of data analysis

Result

The top 100 venues within a radius of 2,500 meters are selected to analyse each neighbourhood

District	Total Venue #
Central and Western	100
Sha Tin	100
Yau Tsim Mong	100
Wong Tai Sin	100
Wan Chai	100
Tsuen Wan	100
Southern	100
Eastern	100
Sham Shui Po	100
Kwun Tong	100
Kowloon City	100
Yuen Long	86
Tuen Mun	78
Sai Kung	70
Tai Po	55
Kwai Tsing	50
North	38
Islands	11

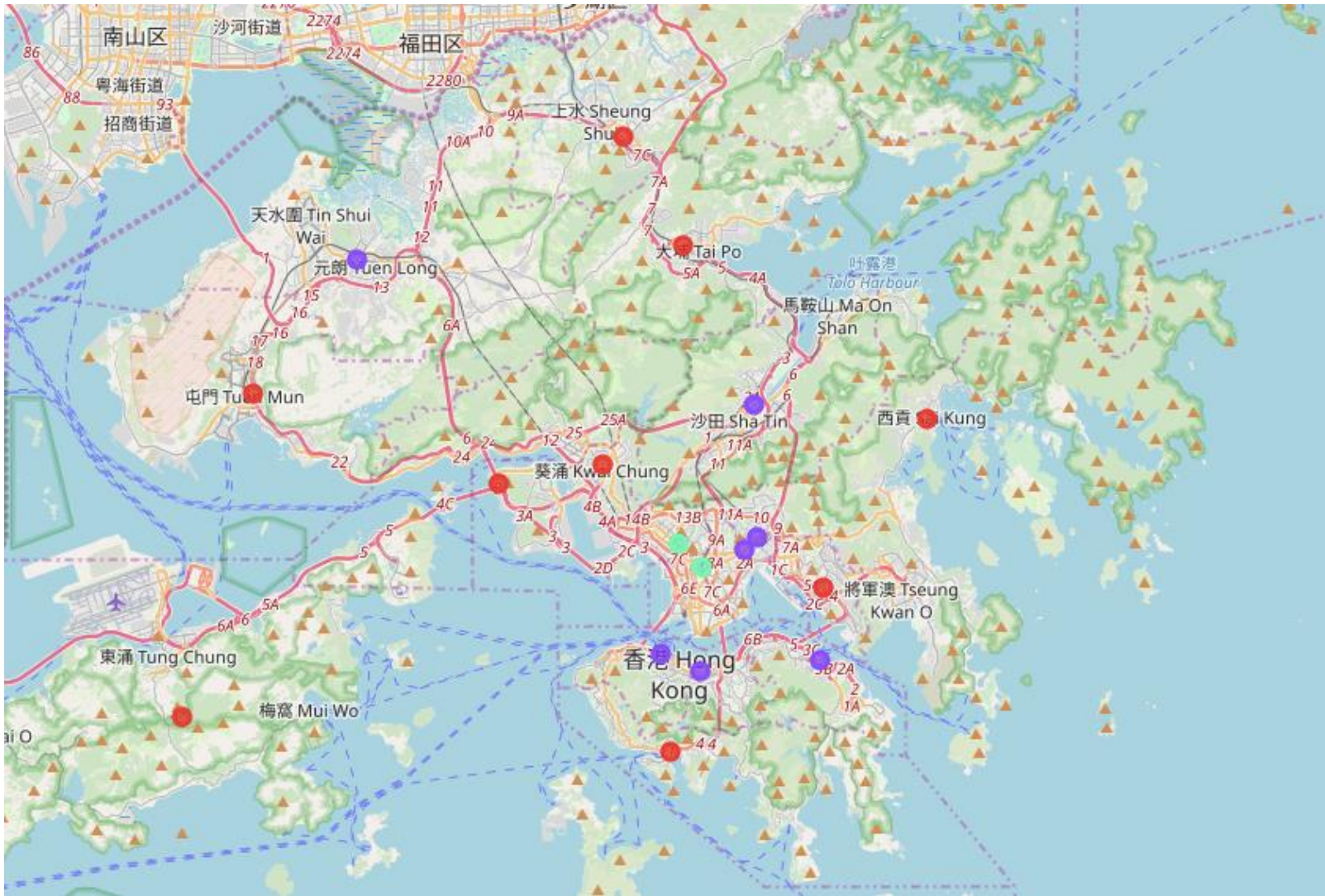
District	Restaurant Venue #
Tsuen Wan	43
Sha Tin	41
Central and Western	39
Tuen Mun	36
Sham Shui Po	36
Yuen Long	36
Eastern	35
Kwun Tong	32
Wong Tai Sin	32
Kowloon City	31
Wan Chai	31
Yau Tsim Mong	30
Sai Kung	25
Tai Po	23
Southern	18
North	17
Kwai Tsing	14
Islands	4

The density of “vegetarian / vegan restaurants”

Districts	Density
Yau Tsim Mong	6.67%
Sham Shui Po	5.56%
Kowloon City	3.23%
Wan Chai	3.23%
Wong Tai Sin	3.13%
Eastern	2.86%
Yuen Long	2.78%
Central and Western	2.56%
Sha Tin	2.44%
Sai Kung	0.00%
North	0.00%
Southern	0.00%
Tai Po	0.00%
Tsuen Wan	0.00%
Tuen Mun	0.00%
Kwun Tong	0.00%
Kwai Tsing	0.00%
Islands	0.00%

Result

Overall low density of vegetarian restaurant, representing huge potential in Hong Kong green market



Cluster 0

No vegetarian restaurant

Cluster 1

Lower density of
vegetarian restaurant

Avg. 3%

Cluster 2

Higher density of
vegetarian restaurant

Avg. 6%

Result

Vegetarian restaurants are concentrated in the central area of Hong Kong, while no ones in the rural area as cluster 0, which includes half of the districts in Hong Kong



Cluster 1 is advised to be
the best location for vegetarian business
for restaurant owners

- **Lower Competition** than cluster 2 due to lower density of vegetarian restaurant – 3% in cluster 1 vs. 6% in cluster 2
- **Lower Risk** than Cluster 0 due to the uncertainties to pioneer an untapped market with no existing vegetarian restaurant
- **Higher Potential** with all the areas' density under 3.7%, the vegetarian population proportion in Hong Kong, especially the districts with lower density in cluster 1

Discussion

Advices for people who plan to open a new vegetarian restaurant in Hong Kong



All areas are advised to increase the proportion of vegetarian restaurants



All areas are advised to increase the investment of vegetarian restaurants



Cluster 2 are recommended to explore the eco-friendly world

Discussion

Other suggestions for the relevant stakeholders

- Veganism is burgeoning in Hong Kong and the opening of a vegetarian restaurant is a great business opportunity
- **Sha Tin, Central and Western, and Yuen Long** are the best areas to operate the vegetarian business

***Please note that the project only considers one indicator, the density of vegetarian restaurant.** You may need to analyse other factors such as gender ratio, age distribution average income and consumption behaviour for further decision making.*

Conclusion

Sha Tin, Central and Western, and Yuen Long are recommended to open a new vegetarian restaurant in Hong Kong